

AMG-18
TSTCore Update

9 April 1997

Topics

- **Events Calendar**
- **Service/Joint Staff Transition Activities**
- **AMG Membership Expansion**
- **Supporting SW Development**
- **Federate Compliance Testing Status**
- **External Events**
- **HLA Education/Outreach**
- **International Cooperation on HLA**
- **Real-time Platform Reference FOM Action Item**

Events Calendar

- 11-12 Feb. 97 **AMG-17**
- 17-19 Feb. 97 **Multinational Working Group Meeting**
- 25-26 Feb. 97 **MORS Mini-Symposium, Albuquerque**
- 3-7 March 97 **Simulation Interoperability Workshop**
- 10-14 March 97 **OMG Meeting, Austin, TX**
- 18 March 97 **RTI Performance Tech. Exchange**
- 20 March 97 **HLA Users Group, Wright Patterson AFB**
- 24 March 97 **Fed. Management Tech. Exchange**
- 27 March 97 **FAA HLA Tutorial, FAA Tech. Ctr.**
- 1 April 97 **RPR FOM Task Force Meeting**
- 2 - 3 April 97 **Object Model Tech. Exch. / OMDT Users Meeting**
- 5-10 April **IETF Meeting in Memphis**
- 8 April 97 **TM/DDM Tech. Exchange**
- 9-10 April 97 **AMG-18**
- 17 April 97 **MORS HLA Tutorial**
- 23 April 97 **ITEC Europe**
- 29 April 97 **Fed. Management Tech. Exchange**
- 22-23 May 97 **Industry Days**
- 9-12 June 97 **MORS Annual Meeting, HLA Tutorial**
- 18-19 June 97 **AMG-19**

Service/Joint Staff Transition Activities

- **Continuing discussions sharing Service and Joint Staff implementation actions**
- **Similar sessions have been held with other DoD agencies (NRO, DIA, BMDO, DSWA)**
- **At Service and agency request, DMSO has continued to support HLA technical interchange meetings**
- **Components are working toward June report to USD(A&T)**
 - **Army and AF are reviewing inputs from data call**
 - **Navy data call has been released**
 - **Joint Staff is coordinating draft plans**
 - ♦ **Accessible from MSOSA web site**

AMG Membership Expansion

- **Joint National Test Facility (JNTF) -- Wargame 2000 -- is newest AMG member**
- **DMSO will adjust AMG membership based on following prerequisites**
 - **Nominated by a DoD Component M&S Management Office**
 - **Programs currently involved in actual development of an HLA-compliant simulation, or modifying a simulation to make it HLA-compliant**
 - **Folks with dirty hands, not oversight offices**
 - **Government employee as the representative; contractors still involved but can't vote**
 - **Self-funded**

Supporting SW Development

- **Runtime infrastructure (RTI) and Object model development tool (OMDT) software development is on track**
 - **Reports on these are included in the AMG18 agenda under RTI and Object Model Update presentations**
- **Alpha version of Object Model Library (OML) is implemented**
 - **OML will be discussed under HLA data support**
 - **Demonstration is available at AMG18**

Federate Testing Status

- **Technical exchange was held at AMG17; Testing approach was reviewed in light of tech exchange results**
 - GTRI is developing process and tools, AB Tech will administer testing
- **Draft certification test process has been developed; test process is straightforward:**

Federate Under Test	Certification Agent
1. Submit Conformance Statement and SOM	2. Test SOM and conduct Conformance X-Check
4. Execute Test Sequence	3. Return IF Test Sequence

- **Process being “tested” on test victims: Jager, ModSAF, CCTT, and federates in the C2/HLA experiment (NASM/AP, NSS, Eagle, FMT)**
- **Simple automated test support tools now working; in the future, testing to be conducted via automated system on the web**

External Events: MORS and SIW

- **MORS Mini-Symposium on Linking Simulations for Analysis**
 - February 25-26, Albuquerque, NM
 - February 24, preceded by Tutorial on Common Technical Framework including HLA
 - Approximately 80 people attended the tutorial, 150 the Mini-Symposium
 - Excellent discussion of opportunities and issues of CTF to support analysis
- **Simulation Interoperability Workshop (SIW)**
 - March 3-7, Orlando
 - Included a tutorial on morning of the first day
 - Approximately 350 people attended the tutorial, over 1000 the workshop
 - Broad discussion of HLA technologies and their application across the wide range of DoD users

External Events: OMG

- **OMG Simulation SIG met in Austin on 10-13 March**
- **Attendees included reps of**
 - **DMSO, MITRE, 3M, Ameritech, Southwestern Bell, Fujitsu, Booz Allen Hamilton, Concurrent Technologies Inc., and Deere & Co.**
 - **Open meeting; others may send reps as desired**
- **Main accomplishments:**
 - **Presented 2-hour tutorial on the RTI services**
 - **Identified asynchronous messaging as a major OMG technology in process of adoption that the SIG cares about.**
 - **Reviewed reports on several other CORBA services.**
 - **Reviewed a draft of a white paper describing SIG goals for simulation and OMG technology.**
- **Action items:**
 - **DMSO (Kuhl) will attend the next meeting in Stresa, Italy, using the meeting to build European participation.**
 - **DMSO (Kuhl) and another SIG member will participate in the technical evaluation of the proposals for asynchronous messaging services.**
 - **Various members will track the identified relevant OMG technologies.**

HLA Education/Outreach

- **Integrated training/outreach program has been initiated**
 - **AEgis will provide overall integration support**
- **Program is based on reuse of 'training modules'**
 - **Developed as products of the HLA technical development activities**
 - **'Packaged' to support education and outreach activities**
- **Initial set of modules has been identified; each module includes both briefing materials and associated written documentation**
 - **Reuse of many DIS and SISO papers**
- **Leads of technical activities will participate in training events as required (and available) as will AEgis training team members**
- **First iteration of training materials will be delivered 15 April;**
 - **These will be updated and new modules will be added as technical work continues and requirements are identified**

HLA Education/Outreach

- **Current Training Modules include**
 - **HLA Executive Summary**
 - **HLA Definition and Specification**
 - **Time Management in the HLA**
 - **Data Distribution Management in the HLA**
 - **Federation Development and Execution Process**
 - **Protofederation Experiences**
 - **HLA Object Model Development: A Process View**
 - **Runtime Infrastructure**
 - **HLA Security**
- **Additional Training Modules will include (among others)**
 - **HLA Federate Compliance and the Testing Process**
 - **Object Model Development Tools and the Object Model Library**
 - **OM Content Standards**

International Cooperation on HLA

- **Multi-National Working Group Meeting met in Portugal in February**
 - **NATO Training Simulations to support Computer-Aided Exercises (CAXs)**
 - **Participants include UK, France, Netherlands, Germany, Greece, Turkey, Portugal, and the US**
 - **Currently use ALSP to support interoperability in operating federation**
 - **Transition to HLA planned**
 - **Hands on training course planned for July at WPC**
- **NATO Steering Group on M&S**
 - **Plans for a Technical Seminar on HLA in July at the Hague to include both technical presentations and demonstrations**
- **French Ministry of Defense visited DMSO to discuss plans to adapt Escadre, an air analysis simulation, to use HLA**
- **UK presentation on Project FlashHLamp is included on the AMG agenda**
- **ITEC Europe on 23 April; HLA panel and presentations**

Realtime Platform Reference FOM: Background

- **Realtime Platform Reference (RPR) FOM development was by undertaken by the former DIS Protocol Working Group in an effort to**
 - **Leverage the interoperability gained through data incorporated in DIS PDU and**
 - **Support transition to HLA for current DIS IEEE 1278 users**
- **HLA data support team is working with RPR FOM activity in data team efforts to develop content standards for OMs and an OM data dictionary**
 - **Mapping RPR FOM data to DoDDDS to support DoD interoperability**
- **Action item from AMG17**
 - **Create a task force of AMG members whose programs currently use DIS IEEE 1278 and hence have an active interest in the RPR FOM**
 - **Given common interest among multiple AMG programs, an organized effort to track and support this effort was deemed warranted**

Realtime Platform Reference FOM: Activities

- **Meeting was held with RPR FOM lead, Graham Shanks (GEC Marconi), and the HLA data support team on 4 March to get an update on current activities**
- **An AMG task force meeting was held 1 April; Graham Shanks and the HLA data support team participated**
 - **AMG programs participating were CCTT, BFTT, JTCTS, and T&E (TENA and ACETEF)**
- **Objectives of the meeting were**
 - **Common understanding of directions and intent of RPR FOM activities**
 - **Identify questions or issues on the part of the participating AMG programs**
 - **Identify opportunities for cooperative initiatives between the AMG and the RPR FOM activity**

Realtime Platform Reference FOM: Discussion Points

- **RPR FOM development is an evolutionary process, beginning with mapping current DIS 1278 data to a FOM format but expect to move to a broader look at new ways to operate under HLA**
- **RPR FOM seen as a starting point for the development of SOMs or FOMs**
 - **User CONOPS of subsetting and extending RPR FOM**
- **Considerable discussion in the RPR FOM group about the FOM hierarchy**
 - **Varying views about the depth and nature of hierarchy**
- **Recognition that federates will need to be able to support different FOMs depending on the needs of different federations**
 - **FOM hierarchy is intended to support publication/subscription needs of a particular federation**
 - **Federates will need to be able to readily adapt to needs of different federations if reuse is to be successful, and hence will need to be able to support different FOMs**

Realtime Platform Reference FOM: Task Force Meeting Results

- **Agreed there is a great deal of mutual advantage to continued cooperation**
- **Seidensticker will continue as the HLA liaison to the RPR FOM activity; Bob Lutz and the HLA data support team will continue to participate**
 - **Other AMG members/ reps are welcome; open forum**
- **The need for flexible HLA interface software to support 'FOM Flexibility' should be highlighted**
 - **Technical exchange on this topic to share experiences of AMG member programs set for the end of day 1 of the AMG18**
- **Agreed to work with RPR FOM activity to experiment with different configurations of the RPR FOM (e.g., FOM hierarchies)**
 - **NOT to assess relative merits of each, but rather**
 - **To assess techniques to facilitate federates adapting to support different configurations as the need arises**